

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---|------------------|----------------------|-------------------------|-----------------|--|
| 09/660,948 | 09/13/2000 | Thomas K. Fehring | 8881-1A | 7387 | |
| 826 | 7590 05/15/2002 | | | | |
| ALSTON & BIRD LLP | | | EXAMI | EXAMINER | |
| BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 | | | WESSMAN, ANDREW E | | |
| CHARLOTT | E, NC 28280-4000 | | ART UNIT | PAPER NUMBER | |
| | | | 1742 | D | |
| | | | DATE MAILED: 05/15/2002 | 0 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| · · | | Application No. | Applicant(s) | - (mg |
|---|--|---|--|-------|
| | • | | | |
| | Office Action Summary | 09/660,948 | FEHRING ET AL. | |
| | | Examiner | Art Unit | |
| | The MAILING DATE of this communication app | Andrew E Wessman | he correspondence address | |
| Period fo | | ocars on the cover sheet with the | ne correspondence address | |
| THE I - External after - If the - If NO - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period is reto reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply by within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS accuse the application to become ABAND | pe timely filed) days will be considered timely from the mailing date of this communication ONED (35 U S C § 133) | |
| 1)⊠ | Responsive to communication(s) filed on 14 I | <u>March 2002</u> . | | |
| 2a)⊠ | | nis action is non-final. | | |
| 3) | Since this application is in condition for allows | | | S |
| Dispositi | closed in accordance with the practice under on of Claims | Ex parte Quayle, 1935 C.D. 1 | 1, 453 U.G. 213. | |
| 4)🖂 | Claim(s) 17-22 and 35-37 is/are pending in th | e application. | | |
| | 4a) Of the above claim(s) is/are withdraw | wn from consideration. | | |
| 5) | Claim(s) is/are allowed. | | | |
| 6)⊠ | Claim(s) <u>17-22, 35-37</u> is/are rejected. | | | |
| 7) | Claim(s) is/are objected to. | | | |
| 8)[| Claim(s) are subject to restriction and/o | r election requirement. | | |
| Applicati | on Papers | | | |
| 9)[| The specification is objected to by the Examine | er. | | |
| 10) 🔲 - | The drawing(s) filed on is/are: a)☐ acce | pted or b) objected to by the E | Examiner. | |
| — | Applicant may not request that any objection to the | | | |
| 11) 🔲 - | The proposed drawing correction filed on | _ | proved by the Examiner | |
| 40\□: | If approved, corrected drawings are required in re | • | | |
| . — | The oath or declaration is objected to by the Ex | aminer. | | |
| _ | inder 35 U.S.C. §§ 119 and 120 | | 0() () (0 | |
| | Acknowledgment is made of a claim for foreign | n priority under 35 U.S.C. § 11 | 9(a)-(d) or (f). | |
| a)(| ☐ All b)☐ Some * c)☐ None of: | | | |
| | 1. Certified copies of the priority document | | | |
| | 2. Certified copies of the priority document | | · · · · · · · · · · · · · · · · · · · | |
| * S | 3. Copies of the certified copies of the prio application from the International Buse the attached detailed Office action for a list | reau (PCT Rule 17.2(a)). | _ | |
| 14) 🔲 A | cknowledgment is made of a claim for domesti | ic priority under 35 U.S.C. § 1 | 19(e) (to a provisional application | on). |
| |) The translation of the foreign language pro Acknowledgment is made of a claim for domest | • • | | |
| Attachmen | t(s) | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> | 5) 🔲 Notice of Inform | mary (PTO-413) Paper No(s) mal Patent Application (PTO-152) | |
| S Patent and T | rademark Office | · | | |

Application/Control Number: 09/660,948

Art Unit: 1742

DETAILED ACTION

Page 2

1. Claims 17-22 remain for examination. Claim 17 has been amended. New claims 35-37 have been added.

2. The rejection under 35 U.S.C. 112, second paragraph has been withdrawn in view of the amendment. The objection to the disclosure has also been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The mathematical relationship defined by the applicant for controlling the composition of the alloy, $%Co / (%Cr + \frac{1}{2} %Mo) \le 0.450$, is inconsistent with the disclosure of specific compositions in the specification. It is the examiner's opinion that the wording of this claim is simply wrong, so that what applicant meant was for the formula to be (%Cr + ½ %Mo) / %Co ≤ 0.45. Expressing the claim as such a mathematical formula would greatly aid in clarifying the claim. Correction of the claim to be consistent with the compositions stated in the specification is required. For the purposes of examination, it will be assumed that the relationship was meant to be of the formula given above.

Claim Rejections - 35 USC § 102

Application/Control Number: 09/660,948

Art Unit: 1742

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Stinson (U.S. Patent No. 5,891,191).

Stinson is applied to the claims for the reasons set forth in paper No. 4, paragraph 5.

In regards to the amended feature of claim 21, the amendment serves only to clarify the claim limitation, and does not alter the scope of the claim in any way.

7. Claims 35-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Stinson (U.S. Patent No. 5,891,191).

Stinson anticipates the invention substantially as claimed. Stinson discloses a biocompatibile Co-Cr-Mo alloy comprising (see col. 3, lines 45) 26-31 wt% Cr and 4-8 wt% Mo and also with minor additions of up to 5 wt% nickel (col. 5, lines 21-25), less

Art Unit: 1742

than 1 wt% iron (col. 5, lines 39-40), and less than 0.35 wt% carbon (col. 5, lines 27-30), with the remainder being cobalt.

With regards to the features of claim 36, Stinson discloses that the Co-Cr-Mo alloy may also contain up to 0.25 wt% nitrogen (col. 5, lines 25-27), and up to 1 wt% silicon (col. 5, lines 39-41). Stinson does not specifically mentioned the inclusion of titanium in the alloy, but because the claimed invention recites "less than about 0.02% Ti", the claimed invention does not preclude a value of 0%, and so Stinson anticipates the claimed invention.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 22 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson.

Claim 22 is rejected for the reasons set forth in paragraph 7, paper No. 4.

With regards to claim 37, while Stinson does not specifically disclose the claimed ratio of cobalt, chromium, and molybdenum percentages in the alloy, Stinson discloses ranges of alloy compositions which would inherently meet such a relationship, and so the claimed invention still falls within the scope of the Stinson disclosure. For example, the composition given in the abstract (Co-26Cr-6Mo-1Si-1Fe-1Mn-1Ni) of Stinson would give a value in the relationship of 0.45, and a similar alloy with less minor element

Art Unit: 1742

additions or less molybdenum but still within the scope of Stinson would provide an alloy with a smaller value in the relationship. It would have been obvious that in selecting an alloy within the scope of the composition given by Stinson, the claimed relationship would have been met.

Response to Arguments

- 10. Applicant's arguments filed March 14, 2002 have been fully considered but they are not persuasive. In the remarks, applicant argues:
 - (1) The prior art does not recognize or provide a solution to the problem of forming second phase particles in the material; and
 - (2) The prior art alloy is structurally different from that of the present invention.

With regards to applicant's argument (1), it is immaterial that applicant recognizes different advantages to the claimed composition than the prior art recognized because the prior art composition is identical to that of the claimed invention, and so the properties of the claimed invention are inherently there in the prior art. Where the claimed and prior art products are identical or substantially identical in structure or composition, or a produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 195 USPQ 430, 433 (CCPA 1977) MPEP 2112.01. In this case, because the compositions are identical, a prima facie case of anticipation has been established.

With regards to applicant's argument (2), because the compositions of the claimed alloy and the prior art are identical, and because applicant has not claimed the

Art Unit: 1742

structure of the alloy, the claimed alloy would not have been materially different from the prior art.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew E Wessman whose telephone number is (703)305-3163. The examiner can normally be reached on Monday through Friday. 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703)308-1146. The fax phone numbers for

Application/Control Number: 09/660,948

Art Unit: 1742

Page 7

the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

AEW May 14, 2002 ROY KING SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700